Remarks

Claims 1-25 are pending. Claims 1-11 and 18-25 have been withdrawn by the Examiner.

Claims 12-14 were rejected under Section 102 as being anticipated by Rhodes 6257569. Claims 15-17 were rejected under Section 103 as being obvious over Rhodes in view of La Mers 4648930. The rejections are all based on the assertion that Rhodes teaches the variable resistance separator of Claim 12. As detailed below, this assertion is not correct.

Claim 12 recites that the separator is configured to separate a top sheet on the stack from a next-to-top sheet in the stack by resisting the movement of sheets along the media path and that the degree of resistance varies along the length of the separator. The Examiner asserts Rhodes teaches these limitations at Figs. 13a and 13b and at column 7, lines 23-32 (Office Action page 4). The cited passage from Rhodes is reproduced below along with Figs. 13a and 13b.

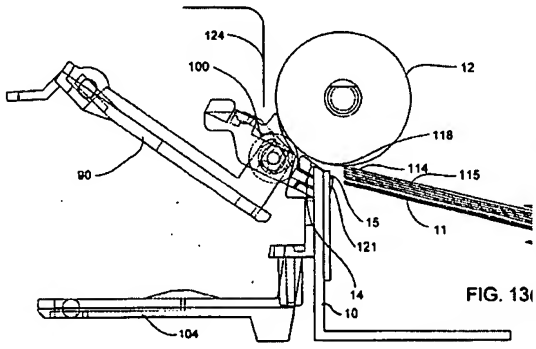

FIG. 13(

As shown in FIG. 13(*a*), the pressure plate **11** is in the paper-up position, with the top sheet pressed against the pick rollers **12**. In FIG. 13(*b*) the top sheet **114** is pulled into the throat **118** by the pick roller **12**, eventually passing over the separator pad **15**. The separator pad **15** is used to prevent more than one sheet of media from advancing through the throat **118** at a time. The separator pad **15** is preferably made of an elastomer such as rubber, with a Shore-A durometer of 50–90. The pick roller **12** is preferably made of an ethylene-propylene diene monomer with a durometer of about **35**. The softer pick roller **12** creates more friction against the top surface of the top sheet **114** than is created between the bottom of the top sheet and separator pad **15** so that the top sheet **114** is pulled past the separator pad **15**, whereby its leading edge enters the nip formed between the pick roller **12** and the pinch rollers **100** and is advanced upward against frame **124**.

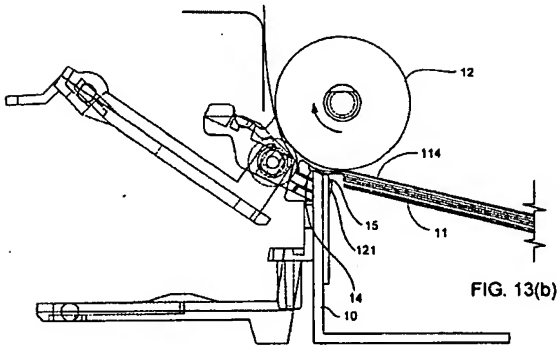

FIG. 13(b)

Conspicuously absent from this passage in Rhodes is any teaching (or even any suggestion) that the degree of resistance presented by separator pad 15 might somehow vary along its length. Nor is there any such teaching in Figs. 13a and 13b

themselves. The Examiner's reference to "the softer pick roller 12 creates more friction against ... top sheet 114 than ... separator pad 15" is irrelevant to the limitations of Claim 12. The fact that pick roller 12 might grab the top of sheet 114 more than separator pad 15 resists the bottom of sheet 114 teaches nothing at all about the resistance of pad 15 varying along its length. If the Examiner disagrees, he is respectfully requested to explain how it is that the comparative hardness/softness of pick roller 12 and pad 15 might somehow reasonably be deemed to teach a varying degree of resistance along the length of pad 15. Absent such a showing, the rejections based on Rhodes should be withdrawn.

With regard to the further limitations of Claim 13, the Examiner asserts that this same passage in Rhodes teaches that the resistance of the separator varies from a greater resistance at an upstream part of the separator to a lesser resistance at a downstream part of the separator. As noted above with regard to Claim 12, Rhodes does not teach a varying resistance in general and, accordingly, Rhodes also does not teach a resistance varying from upstream to downstream.

Claim 14 depending from Claim 13 recites that the separator comprises:

a pliable sheet;

first and second supports extending along and supporting the sheet, the supports oriented relative to one another such that a distance between the supports at the downstream part of the separator is greater than a distance between the supports at the upstream part of the separator ; and

a protrusion extending along and protruding from the sheet between the supports.

The Examiner asserts that separator pad 15 in Rhodes is a sheet and that frictional forces are the claimed first and second supports extending along and supporting the sheet. Office Action pages 4-5. Applicants do not understand how frictional forces in general might support pad 15 in Rhodes, and specifically how frictional forces "acting on the media ... and between the pick rollers and pinch rollers" can be said to constitute first and second supports extending along and supporting pad 15. It seems clear that any such frictional forces do not support pad 15. On the contrary, any such forces would bear against and thereby load the structural features that really do support pad 15.

Claim 14 recites that the supports are closer together at the upstream part of the separator than they are at the downstream part of the separator. In this regard the Examiner states at page 5 of the pending Action:

> "the supports oriented relative to one another (i.e., the separator is extended so that a rearward portion of the separator comes into contact with one of the pick rollers so as to form a throat between a forward portion of the separator and the pick roller; col. 4, lines 15-20) such that a distance between the supports at the downstream part of the separator is greater than a distance between the supports at the upstream part of the separator (i.e., the rubber surface of the separator pad 15 creates enough friction between itself and the underlying media sheets to overcome the friction created between the top sheet; col. 7, lines 39-42)"

Again, Applicants fail to see how friction between pad 15 and sheets of print media has any relevance at all to the orientation of any structure supporting pad 15 in general, and specifically how these frictional forces might somehow be deemed to teach supports that are closer together at the upstream part of pad 15 than they are at the downstream part of pad 15.

Rhodes also does not teach that pad 15 is a sheet. A sheet is thin in comparison to its length. Rhodes does not describe the shape of pad 15 at all. Pad 15 is called out and shown in Figs. 13a-13b and in Fig. 14a. Pad 15 may be visible in Figs. 12 and 15 as part of separator 14 but it is not called out in Figs. 12 and 15. Thus, it is not clear what part of separator 14 might be deemed to be pad 15 in Figs. 12 and 15. In any event, what does appear to be clear is that there is nothing in any of the figures in Rhodes that can reasonably be deemed to teach that any part of pad 15 is a sheet.

Finally with regard to Claim 14, media retarder 120 does not protrude "from" any part of pad 15 as claimed. Rather, retarder 120 protrudes "above the level of the retracted separator pad." Rhodes column 8, lines 42-43.

With regard to the further limitations of Claim 15, for the same reasons noted above for Claim 14, Rhodes also does not teach the supports recited in Claim 15. Also, with regard to an elastomeric pad affixed to or integral with the flexible material between the supports, as claimed, pad 15 in Rhodes cannot be both the span of flexible material supported on the elongated supports and an elastomeric pad affixed to integral with the flexible material.

The foregoing is believed to be a complete response to the pending Action.

Respectfully submitted,

/Steven R. Ormiston/

Steven R. Ormiston
Attorney for Applicant
Registration No. 35,974
208.433.1991 x204